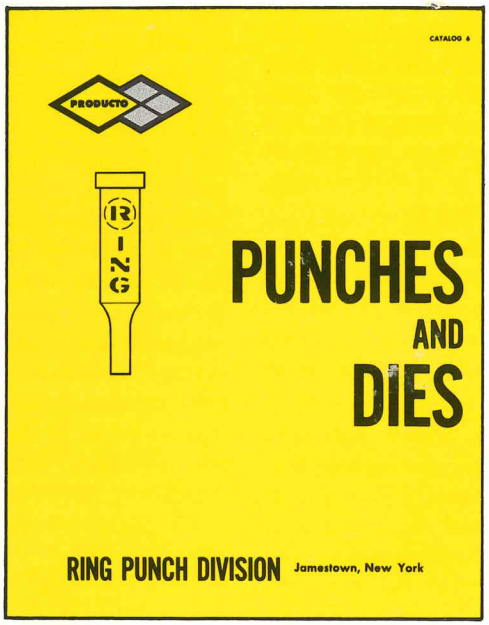
VOLUME 10 NO. 1

diemaker's digest

Producto now offers largest single-source selection of round or shaped punches and dies



New catalog greatly expands choice to meet every production need

(see pages 4-5)

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Inside story on Producto's No-Groove Ball-Bearing Bushings

(They solve many problems — they could solve yours)

We don't claim that Producto's No-Groove Ball-Bearing Die Sets perform miracles. They have their limitations. They are likely to act up if pushed beyond the working limits for which they were designed; and they'll eventually misbehave if required to perform on old or poorly maintained presses.

But our No-Groove bushings, with their patented ball bearing retainers, have been out and around long enough for us to document the fact that they are performing superbly in a wide variety of production operations. Here are just a few:

High-speed blanking of very thin paper where near-zero clearances between punch and die are required. Heavy "dust" factor created contamination problem on conventional sets.

Asbestos and vinyl asbestos floor tile with tungsten carbide cutting elements. Extremely close punch to die clearance and alignment also needed here. Contamination a constant hazard. No-Groove die sets working 24 hours a day, 6 days a week—perfectly.

Precision metal stamping of parts for electrical and electronics industry. Materials: brass, copper and some semi-hard steels in thicknesses ranging from .005″ to .060″ and at speeds to 1200 spm. Hundreds of millions of hits thus far, with no observable adverse effect on die sets.

Shaving die operations on Armco magnetic steel parts requiring high quality finish. Abrasive chips from shaving operation caused constant wearing or scoring of pins in other makes of die sets. The antidote: No-Groove.

Piercing, notching, blanking and forming of electrical terminal connectors using .0085″ phosphor - bronze. At 450 spm, 100 million units have been produced to date with no sign of pin or bushing wear.

Producto sales engineers won't recommend No-Groove ball - bearing bushings in *every* problem situation. But No-Groove sparkles when it comes to jobs involving high speeds, excessive chip conditions, tight punch to die clearances, and close alignment of punches and dies . . . *and* when presses are in good operating condition and conscientiously maintained, chances are excellent that No-Groove will outperform and outlast any other set you've ever had.

Now from Producto: a precision steel die set for less money

PS sets offer wide choice of sizes at new low prices

If you don't need clamping flanges, bolt slots and closely held punch and die holder thicknesses, you can buy a Producto PS die set for as little as half the price of commercial sets in other styles or makes.

Here's how Producto makes this possible: by eliminating material in the flange area and milling of the flanges; by eliminating the cost of contour flame cutting; reducing the amount of grinding time required by grinding plate to cleanup rather than to size; and by manufacturing larger lots.

The result: considerable savings to *you* on quality steel die sets.

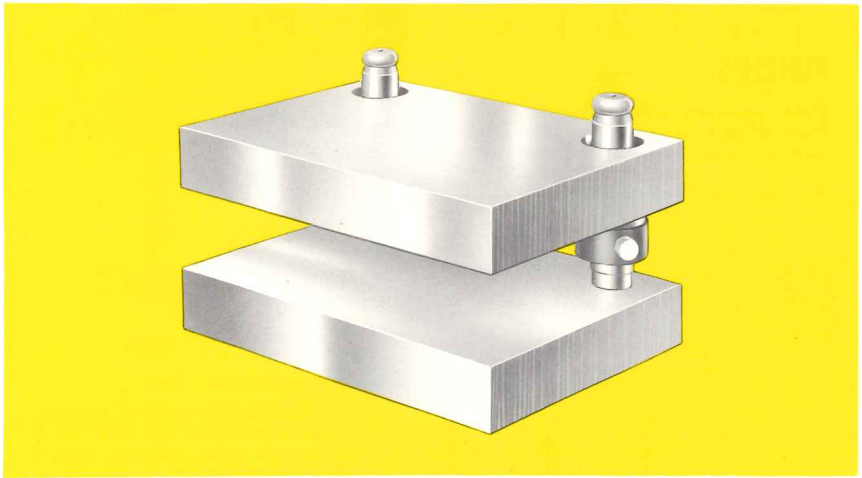
There is nothing "cheap" about these low-priced sets. Every one of them meets or exceeds recognized industry standards for flatness, parallelism, pin alignment, center distances and material. Front and back edges are machined the entire length of the set.

Our PS line supersedes the line which we previously called "Economy" sets, and at the same time offers a broader selection of die areas, die bed thicknesses, and options on pins and bushings.

Six new and larger die areas and a third thickness to die holders in many of the sizes brings these sets well into the size range of small specials.

These sets can be ordered with a wide choice of Producto pins and bushings, including our patented insulated guide pins which reduce electrical discharge machining costs.

PS sets are offered in both Master and Commercial grades. Ask your Producto branch or distributor for our new catalog.



diemaker's digest *is published by The Producto Machine Company in the interests of better die making, tool making and usage. Address all inquiries and correspondence to 990 Housatonic Avenue, Bridgeport, Conn. 06609, David J. Ryffel, Editor.*

New Ring Punch Division catalog triples offering - new lines, expanded lines, broader range of "ca

DESIGNER LINE

PUNCHES—
MATCHED POINT LENGTHS

Five series are offered: Each designating the **usable point length.** These are offered in round and standard point shapes. All types offered in patented Pull-Pin ejector type.

DIES

Dies are offered with straight and headed body. Round hole dies are solid, shaped hole dies are precision split identical halves. Stripper guide bushings are offered in the same types, styles and shapes as dies.

STRIPPER GUIDE BUSHINGS

STANDARD LINE

PUNCHES

Three series are offered: Regular, Medium and Long usable point lengths. These are made to punch industry standards. Also offered in patented Pull-Pin ejector style.

DIES

All shapes are furnished in single piece construction, not split. Round holes are taper relieved, shaped holes counterbore relieved. Conform to punch industry standards.

sets high quality standards for the punch industry
talog shapes" reduces "specials" considerably

ECONOMY LINE

RING HEAD PUNCHES

Long recognized as low-cost, high-quality punches ideally suited to light duty piercing. Three series of usable point lengths are offered: Regular, Medium and Long. These are also offered in our patented Pull-Pin ejector type.

DIES

Low-cost ring-headed dies made in single piece construction with round holes taper relieved and shaped holes counterbore relieved.

QUILL SETS

A complete offering of bevel and shoulder head punches, bevel head quill holders and stripper guide bushings. These are offered in fractional body, fractional body with decimal points and decimal body punches with holders and guide bushing to accommodate fractional body diameter punches.

MISCELLANEOUS ITEMS

Rubber strippers, transfer punches and counterbores for the Ring type punches and dies are also offered.

SPECIAL SHAPES

All punches, dies and stripper guide bushings may be ordered with non-standard (special) shapes many of which are charted for ease of selection and ordering.

KEYING FOR STANDARD LOCKING DEVICES

Common keying methods which can be included as part of the specification information when ordering punches, dies and stripper guide bushings.

Report on the Perf-O-Mator

Price and performance wins enthusiastic acceptance for Pierce-All's punching and notching machine

When Producto's subsidiary, Pierce-All, Inc., introduced the 25-ton Perf-O-Mator, this punching and notching machine was heralded for its versatility, its operating efficiency, and its ability to effect substantial savings in tooling costs and production costs.

With the added advantage that this machine carries a price tag lower than any machine of comparable capacity in hole size, part size and tonnage, Perf-O-Mators have been purchased and installed in dozens of plants from coast to coast and in Canada. The reaction: enthusiastic.

Among the companies using the Perf-O-Mator today are the Lycoming Division of AVCO, the Vertol Division of Boeing, General Electric's Large Jet Engine Department and its Atomic Energy Division, Bell Engineering Corp., the Four Wheel Drive Company, and many others.

That the machine is more than living up to expectations is evidenced by the growing demand for the machine from all sectors of the country.

Typical of the unstinted praise for the Perf-O-Mator is that expressed by Dominic Messina, plant manager of Federal-Pacific Electric Co., Newark, N. J. The machine was purchased to process trims for electrical panel boxes which the company produces in quantities ranging from one to 50.

Mr. Messina had this to say about the machine:

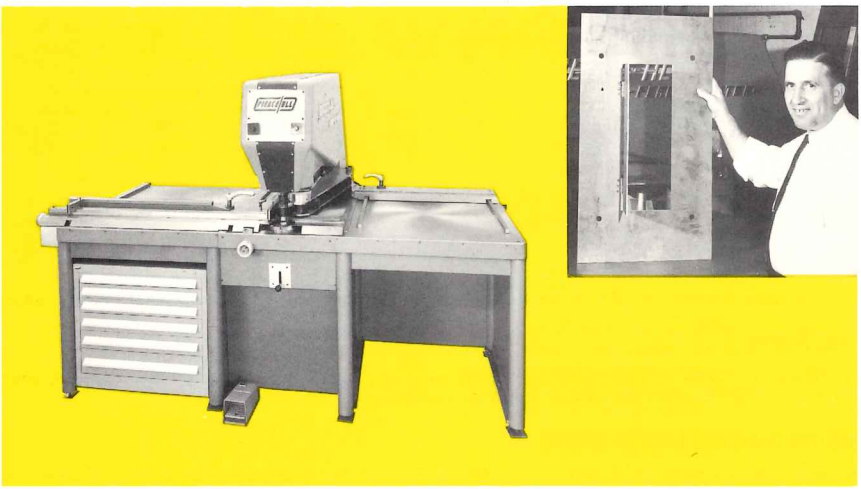
"Our Perf-O-Mator is a great time saver. Before we got it, we fabricated our panel box trims with special tooling on conventional brakes and presses. Gaging setups and tool changes consumed most of the time because these jobs involve 15 different steps.

"Now, setups and tool changes are a matter of seconds . . . On all but the largest sizes, we've gone from a two-man to a one-man operation. And we've gone from a backlog situation to 2/3 of a shift a day . . . with open capacity for other work.

"In time savings alone, our investment in the Perf-O-Mator was fully paid off in 12 months.

"In my book, a one-year payoff for any machine tool is fantastic."

Ask your Pierce-All distributor for literature on this machine. Better yet, have him arrange for a demonstration.



Paraflex Units:

An important new development in unitized tooling from Pierce-All...and at the lowest prices ever

The advantages of unit tooling for short-run operations have long been known. Their low purchase price, fast setup, versatility and re-usability are factors that have accounted for their growing usage in the metal-working industry.

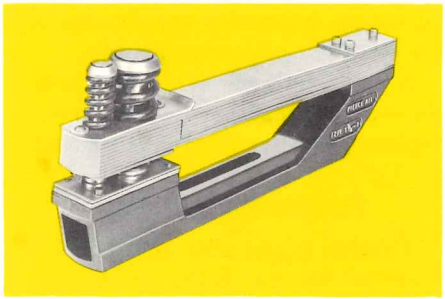
Without doubt the most significant new development in this field since unit tools made their debut some 25 years ago is the Paraflex principle recently introduced by Pierce-All.

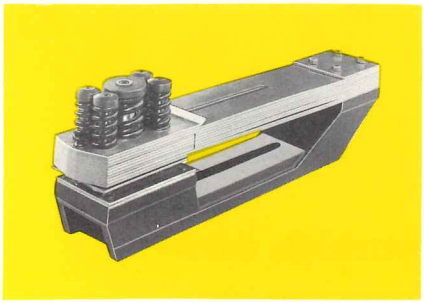
Retaining all the advantages of conventional unit tools, these units utilize a patented Para-Flex arm which eliminates the stripping guide assembly, permitting punching of larger holes on closer centers. Eliminating stripping guides lowers the cost of these units below that for any other line of unit tools on the market.

Paraflex units, with industry's standard 5½″ shut height, are compatible with other makes of regular duty units. They accommodate round or shaped punches and dies and adapt to special punching applications that cannot be handled by standard units. Their unique design also permits modification for close-center punching of clusters of holes in one hit with a single unit.

Pierce-All's Paraflex line includes two additional sizes of notching units: 3″ x 3″ and 6″ x 6″. These are economically priced and have reversible die blades which permit doubling the number of hits before sharpening is required. Their design also allows getting holes closer to the notching edge in single-hit setups.

The Paraflex line supplements Pierce-All's regular line of unit tools. Both lines are available from Pierce-All distributors throughout the U.S.





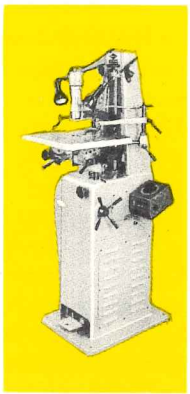
Make EDM more profitable with these companion tools from Producto

Roto-Recipro Toolmaking Machine

The Roto-Recipro is a basic machine for the toolroom, highly versatile and adaptable to the tasks of finish machining prototypes, trial blanks and punch, stripper and die details.

The toolroom having EDM equipment can consider this machine an absolute necessity for machining the intricate shaped perimeters of electrodes for the eroding of punches, dies, or any other kind of detail.

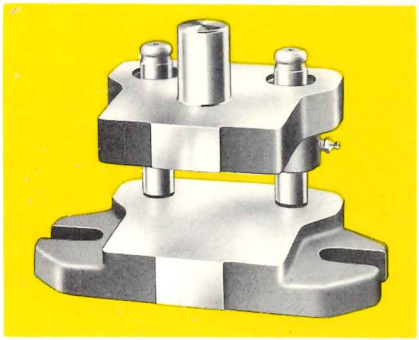
The Roto-Recipro fits between sophisticated, expensive equipment and the random results of "sculpturing" or "barbering." When used, the necessity of making special-form tools, recalculating dimensions, or making comparator charts is largely eliminated.



Insulated guide pin die sets

Our patented insulated guide pins for use in EDM are available in all diameters and lengths for Producto's catalog or special die sets. They are made to precision assembly tolerances in both the regular and Qwik-Fit types. Unlimited choice of bushings is an added advantage of pin-insulated die sets, permitting specification of the set to suit press requirements.

A valuable, time-saving feature of these pins is that they do not require replacement after EDM is completed.



This permits the completed die to go immediately to punch press operation, thus preserving the alignment of punch and die components.

Punches with EDM Tips

Punches tipped with any electrode material for the EDM process are available from our Ring Punch & Die Division. With punches purchased "EDM-READY," lead time is reduced. Knowing the exact cost of both *punch* and *electrode* aids you in determining die making costs. Producto's Ring Division punches—tipped or untipped—cost you much less than manufacturing these items in your own plant.

THE PRODUCTO MACHINE COMPANY

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